Gas Tumble dryer BG 44A_

INSTALLATION AND SERVICE INSTRUCTIONS

Keep this booklet for future reference.

The dryer must be fitted by a competent person. In the U.K. CORGI Registered Installers undertake to work to safe and satisfactory standards.

The dryer must be installed in accordance with the Gas Safety (Installation and Use) Regulations 1998.

Guidance may be obtained from the relevant parts of B.S. 6172: B.S. 5440 parts 1 and 2, B.S. 7624: 2004 B.S. 6891: current editions, I.E.E. Wiring Regulations, and relevant Building Regulations.

Failure to install the appliance correctly could invalidate the warranty liability claims and could lead to prosecution.

FOR USE IN GREAT BRITAIN AND EIRE WITH NATURAL GAS ONLY. GAS CATEGORY I_{2H} GAS SUPPLY PRESSURE 20 MBAR.

THE INSTALLER MUST LEAVE THIS BOOKLET WITH THE CUSTOMER

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WARNING

THIS APPLIANCE SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL REGULATIONS IN FORCE AND ONLY IN A WELL VENTILATED SPACE. READ THE INSTRUCTIONS BEFORE USING OR INSTALLING THIS APPLIANCE.

THIS APPLIANCE CONFORMS TO THE FOLLOWING EEC DIRECTIVES.
LOW VOLTAGE DIRECTIVE LVD 73/23/EEC: EN60 335-1, EN60 335-2.11.
GAS APPLIANCE DIRECTIVE (GAS) 90/396/EEC: EN 1458-1
ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 89/336/EEC: EN55014-1 EN55014-2
EN61000-3-2 EN61000-3-3 EN50366 EN50165

TECHNICAL DATA

GENERAL

Front loading tumble dryer with gas heating. Uni-directional drum tumble. Time control. 2-temperature exhaust thermostat control. Induced air flow enters dryer through front grille, some passes through the gas burner into the rear ducting and some into the cooling passages, this mixed air enters the drum through the rear perforations, passes through the clothes, lint filter, and the fan and is discharged through the vent at the rear.

CONNECTIONS

Gas Pressure: Rp $^1/_2$ ($^1/_2$" B.S.P. parallel internal thread) Nominally 20 mb

Electric: 230V. 50 Hz, earthed-3 pin 13A plug with 13A fuse (wall socket must have efficient earth connection)

DIMENSIONS

Height 85 cms. (33$^1/_2$")
Width 59.6 cms. (23$^1/_4$")
Depth 57 cms. (22$^1/_2$")
Depth when rear vent hose assembled 60cms. (23$^5/_8$")

WEIGHT

With packing	38 kg
Without packing	37 kg

SUPPORT

Machine rests on 2 rear positioned rollers and 2 non adjustable feet.

AIR-FLOW

Approximately 210 cubic metres per hour with capacity clothes load.

IDENTITY

Manufacture date, and serial number are displayed on a plate revealed when machine door is open.
The first 4 numerals identify year and week of manufacture. The last 6 numerals identify the machine. ALL INFORMATION FROM THIS PLATE SHOULD BE QUOTED IN ANY SERVICE COMMUNICATION.

COMPONENTS

DRIVE MOTOR

2 pole permanent split capacitor (8µF)
Approx. $^1/_8$ HP.
Overload protection approx. 140°C.

BURNER

Pressed steel with slotted flame perforations.
Heat input: 4.7kW (16040 Btu/hr). Injector 1.80 mm dia.

CONTROL

Type: Pactrol full sequence flame control, P16A GTD(CE) 414601. Ignition electrode gap to burner 3 to 4mm Flame failure electrode (4213 078 52641). Height from heater base to centre of electrode 27.0±0.5mm.

THERMOCOUPLE

Inconel tipped Constantan thermocouple (K-type).

INLET THERMOSTAT

(Brown wires identification)
Bi-metal contacts normally closed.
Contacts open if airflow restricted.
Contacts open 130°C ± 3°C
Contacts reset 100°C ± 5°C

INLET TEMPERATURE LIMITER

(White wires identification)
Bi-metal contacts normally closed.
Contacts open if INLET THERMOSTAT fails.
Contacts open 143°C ± 4°C
Contacts reset 95°C ± 10°C

EXHAUST THERMOSTATS

Bi-metal contacts normally closed.

Normal Fabrics: 60°C (green spot identification)	Contacts open 60°C ± 3°C Contacts reset 49°C ± 4°C
Delicate Fabrics: 50°C (red spot identification)	Contacts open 50°C ± 3°C Contacts reset 39°C ± 4°C

DRUM

Volume	105 litres
Speed	approx. 50/59 r.p.m.
Capacity	5 kg dry cotton
Rotation	clockwise

TRANSMISSION

Poly-vee belt driven by vee-grooved motor spindle to outer circumference of drum.

TIMER

Electric single pole, 60 mins. max. duration.

HEAT SWITCH

Single pole ON/OFF switch.

R.F.I. FILTER

0.1µF + 2x2400pF + 2x5 mH + 2M2

ACCESSORIES

	VENT HOSE ASSEMBLY	0312 001 01000
	WALL/WINDOW VENT KIT	0312 005 01000
	STACKING KIT	0312 003 01001
	RESTRAINING KIT	0312 006 01000

INSTALLATION

1 INSTALLATION

The dryer is designed for installation using a flexible gas connection with tubing in accordance with B.S. 669.

Ensure that the supply gas sizing is adequate.

An electric supply cord with moulded-on 13 Amp. plug is fitted at the back of the dryer. The length is 1.5 m. (5ft.).

If there are any other appliances that are relatively high rated (eg a central heating boiler) fed from the same gas supply branch. It is advisable to perform the verification of inlet pressure with both appliances in operation.

2 AIR SUPPLY

All rooms in which a tumble dryer is fitted must have an openable window or other means of ventilation.

The customer must be advised that this must be kept open during use.

If the room has a volume less than $10m^3$ an additional permanent ventilator of $100cm^2$ is required.

Additional guidance on the provision of air supply may be obtained from BS5440 parts 1 and 2.

3 POSITION

The dryer must not be installed in a bedroom, bathroom or shower room.

Great care is required in the location of the dryer in premises where concentrations of flammable vapours may accumulate, e.g. commercial garages and associated workshops.

The dryer can be placed against a wall, other appliances, kitchen furniture and similar surfaces.

The appliance must not be installed behind a lockable door, a sliding door or a door with a hinge on the opposite side to that of the tumble dryer.

4 VENTING

In all circumstances the dryer must be fitted with an exhaust vent hose and the end of the hose fitted to a wall/window vent connection

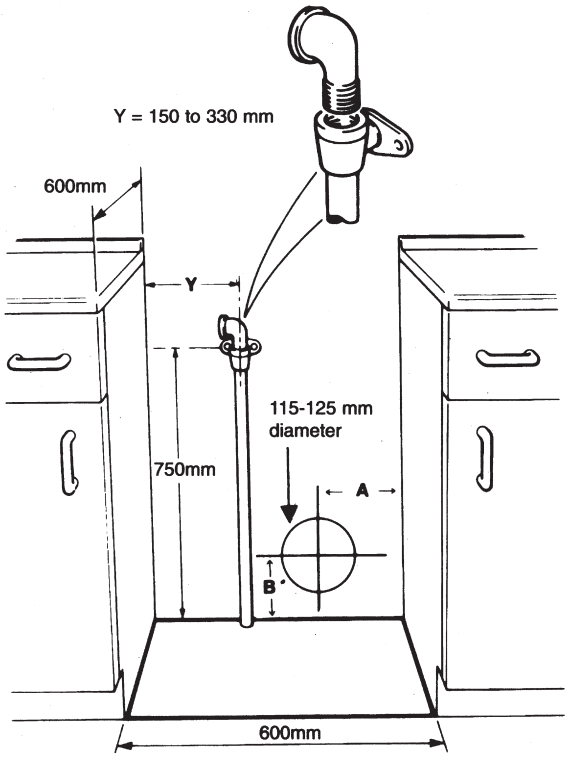
If necessary two vent hoses can be joined. However care must be taken to avoid loops into which steam could condense.

Wall/window vent kit CL005 is available:

See illustration for necessary hole through wall. Dim **A** = 200mm and Dim **B** = 100mm for direct alignment.

Note Dim **B** may be increased to 200mm to facilitate easier drilling if required.

5 POSITION OF DRYER AND CONNECTIONS



The illustration shows the minimum space required by the dryer and the position of the gas wall connector. It is not acceptable to use a forward facing mounting plate because of the space limitation. The sideways facing assembly must be used and this should be fitted so that the flexible hose hangs down from the bayonet connector.

A 13 Amp socket must be provided within a distance of 1.4 m (55 in.) of the cable entry into the dryer. The socket must have an efficient earth connection.

If the dryer is to stand on a surface above the floor or on top of a washing machine (using the Stacking Kit) then the 750 mm dimension is measured above the supporting surface.

If the dryer is installed under a worktop there must be a minimum gap of 15 mm between the top of the dryer and the underside of the worktop to allow for ventilation.

If it is intended to move the dryer regularly for use then the Restraining Kit must be fitted to prevent possible damage to the gas connection.

We also recommend the fitting of a restraining kit to any dryer which is stacked.

If using accessories:

Wall/Window Vent Kit

Stacking Kit

Restraining Kit

See separate fitting instructions included with each Kit.

6. OPERATIONAL CHECK

6.1 Remove the pressure test point screw from the gas tee connection at the back of the dryer and connect a gas pressure gauge.

6.2 Check that the dryer timer is in the 'off' position, and that the heat switch is set to 'high'.

Remove anything from inside the drum, check that the lint filter is fitted, shut the dryer door.

6.3 Turn on the gas, push the electric plug into the socket and switch on the electricity supply.

6.4 Turn the timer clockwise past the dotted line marking the cool-down period to a setting of at least 30 mins. Check for ignition. If the gas fails to remain lit then repeatedly turn the timer on and off (or open and close the door) for periods of at least 30 seconds until the air is removed from the system and burning is continuous. Note that gas is not lit when the drum is turning Anti-clockwise.

6.5 With the gas burning ensure that the pressure is as detailed in the Technical Data. Turn off and replace the pressure test point screw. Check for soundness.

6.6 Switch on again and re-start so that the gas is burning.Disconnect the flexible gas hose and check that the solenoids can be heard to close. After 30 seconds turn on the gas and check that there is no re-ignition. Switch the machine off and on again and check for reignition.

6.7 Check that the operation of the machine does not cause spillage of products of combustion from any open flued gas appliance in the same room, or from appliances in adjoining rooms, e.g. a gas fire or central heating boiler.

6.8 In the event of an electrical fault after installation of the appliance, preliminary electrical system checks must be carried out (i.e. earth continuity, polarity and resistance to earth).

7 AIRFLOW

It is most important that airflow to the plinth is not restricted.

SERVICE INSTRUCTIONS

PROGRAMME

Clockwise rotation of the control knob closes switch contacts within the timer to: a) energise the drive motor, and b) energise the full sequence flame controller.

The timer switch controlling the drive motor and the timer motor, remains closed until the timer motor mechanism returns the control knob to the 'O' position. The timer switch controlling the full sequence flame controller opens 12 minutes earlier to provide a cool-down period.

The full sequence flame controller opens the tandem solenoid gas valves after a delay time of about 8 seconds and operates the pulsing spark ignition. If the flame is not detected by the flame failure electrode within 10 seconds then the valves are closed. The system must then be re-set by switching the machine off and re-starting.

The heat selector switch provides options for either 60°C, or 50°C, exhaust thermostat control. This results in the burner cycling on and off giving longer than anticipated drying times. Drying times vary depending on the weight and size of the articles, type of fabric, dampness etc. These thermostats turn off the heating towards the end of the cycle and so avoid waste of energy. The lower temperature thermostat prevents delicate fabrics from getting too hot with possible risk of damage.

An inlet thermostat is fitted in the ducting at the back of the dryer. It may operate under certain conditions of restriction of the air-flow, for example, an overloaded drum or blocked lint filter. This thermostat switches off the Flame Controller. This will result in the burner cycling on and off giving longer than anticipated drying times. Drying times vary depending on the weight and size of the articles, type of fabric, dampness etc. Should the thermostat fail there is an inlet cut-out connected in circuit with the gas valves. After operation, the cut-out must be re-set to restore heating but a service call may be required to correct the initial fault.

The conditions of failure of the air flow, blow-back, or of gas interruption are detected by the flame failure electrode and the system is shut-down.

Both drum rotation and heater control are switched off when the door is opened and switched on when the door is reclosed.

For programme times see chart on dryer control panel.

Note:

Drying times depend on the weight and size of the articles, the type of fabric, how damp they are and how dry they are required.

RECOMMENDATIONS FOR DISMANTLING

Note: Re-assembly should be done in reverse sequence to these instructions.

TOP ACCESS

Terminal Block (28), Control Unit (10), Timer (211), Heat Switch (235), Neon (213), Micro-Switch Assembly (248), Control Panel (353).

Withdraw 3 screws from the back flange of the Table Top Assy. (386) and lift and move it forwards for removal.

This gives access to the 2-screws securing the Control Unit Bracket (11) to the top flange of the Cabinet.

Pull off the Timer Knob (352) by means of a loop of thin insulating wire inserted behind it, to expose the 2-screws securing the Timer (221) to the control Panel (353).

To remove the Neon (213) disconnect the faston connectors and push the neon out of the Control Panel.

To remove the Control Panel (353), disconnect the faston connectors from the Timer, Neon, and Heat Switch. Withdraw 3-screws securing the Control Panel lugs to the Cabinet top rail. Tilt the Control Panel so that the bottom lugs can be freed from the top flange of the Front Panel (376).

To remove the door Micro-Switch Assy. (248), withdraw the 3-screws securing the Control Panel lugs to the Cabinet top rail and free the Control Panel Assy. from the top flange of the Front Panel. Open the door and withdraw 2 screws securing the Micro-switch Assy, to the Front Panel, unclip the wires from the top flange of the Front Panel, lift out the Assy, and disconnect the faston connectors.

REAR ACCESS LOWER

Exhaust Thermostats (229, 250), Motor Assembly (101), Fan Assembly (446), Capacitor (112).

Withdraw the 6 screws securing the Cover Plate (19) to the Back Panel (24) and remove it. Pull out the Exhaust Tube (30).

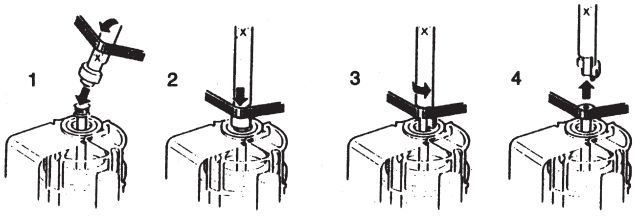
This gives access to the Exhaust Thermostats (229, 250), which are each secured to the Banjo (440) by a screw.

Note: The 50°C thermostat is identified by a red spot on the face.

REAR ACCESS LOWER (continued)

To remove the Motor (101) the Belt (125), must first be removed from the Motor. Disconnect the Motor leads. Withdraw the black headed pin (537). Exert an anti-clockwise force to disconnect the bayonet fitting between the Fan Access Cover (447) and the back of the Banjo Assy (440). From underneath the dryer withdraw the 4-screws (396) securing the Motor Bracket (432) to the cabinet base. Lift out the Motor and Fan Assy.

Special tool (7813 002 61111) is recommended when installing a new belt which needs to be levered and stretched onto the motor spindle (see illustration).

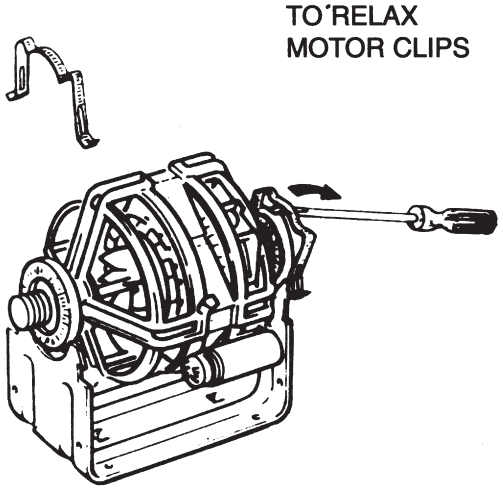


A capacitor (112) is mounted to the motor assembly Disconnect the wires to the capacitor before removing the capacitor or the motor capacitor assembly.

The Fan assembly (446) locates over a key in the motor shaft and is secured by the bolt and washer (406).

It is important that rigid support is provided to the motor shaft when the fan is being refitted. This is to avoid disturbance of the motor bearings from their location.

On reassembly of the fan access cover (447) it is important to hold the protruding finger grip at a "2 o-clock" position to find location. Push the cover fully on to the fan chamber prior to rotating it clockwise and engaging tightly in all 3 locations. Re-insert the black headed pin (537).



HEATER ASSEMBLY REMOVAL

Heater Assy. (32), Solenoid Coil (45 or 45A), Flame failure Electrode (33), Ignition Electrode (39).

Withdraw the 2-screws securing the Plinth (199) to the Cabinet, unhook the bottom edge fixing, and remove it.

Separate the 6-way Housing (31) to release the wiring from the Heater Assy. to the Cabinet.

Lay the dryer flat on its front, supported to take the weight from the door and controls.

Withdraw the 6-screws securing the Cover Plate (19) to the Back Panel (24) and remove it. Pull out the Exhaust Tube (30).

Withdraw the 4-screws securing the Hot Air Elbow Assy. (20) to the Back Panel (24) and remove it.

Disconnect the External Feed Pipe (15) from the Tee Piece (27).

Pull the connectors off the Flame failure Electrode (33) and the Ignition Electrode (39).

Withdraw the 3-screws and shakeproof washers (13) securing the Flame Tube Assy. (34) to the Cabinet base.

Note: On re-assembly the shakeproof washers must be replaced to ensure a good earth connection.

Lift out the Heater Assy.

To remove either solenoid coil (45 or 45A) disconnect the electrical connectors, unscrew the nut (44) from the top of the valve and lift off.

To remove the sensing electrode (33), withdraw the screw (41) lockwasher (482) and nut (411) securing it to the Flame Tube Assy. (34). Note on re-assembly the lockwasher (482) must be replaced to ensure a good earth connection.

To remove the Ignition Electrode (39) withdraw the screw securing it to the top of the Flame Tube Assy. (34).

To remove the thermocouple (57) firstly remove the electrical connection for the thermocouple from the 6-way housing (31) by depressing the tab on the back of the connector. Remove the ignition electrode (39), remove the 2 screws (375) fixing the heater tube extension (34) to the burner housing and the 2 screws (13) fixing the burner housing to the heater tube base (34), then remove the pipework from the bundy tube support clip and slide the burner and pipework assembly away from the heater tube assembly (34). Remove the nut and lockwasher from the thermocouple and lift the thermocouple (57) out.

If there is a fault in the valves, burner or other parts of the gas line, then the Heater Assy. (32) must be replaced.

HEATER ASSEMBLY REMOVAL (continued)

INLET THERMOSTAT & THERMAL OVERLOAD CUTOUT (TOC) REMOVAL

Lay the dryer flat on its front, supported to take the weight from the door and controls.

Withdraw the 6-screws securing the Cover Plate (19) to the Back Panel (24) and remove it. Pull out the Exhaust Tube (30). Disconnect the Faston connectors from the 4-way Terminal Block (142) as necessary (see wiring Diagram for colour code). Cut off the 2-Cable Ties (387). Note: on reassembly these must be re-placed by new components to secure thermostat wiring away from contact with the Drum.

Withdraw the 16-screws securing the Rear Banjo (18) and lift it off.

Withdraw the screws securing the Thermostat (230) and/or TOC (38) and pull the connecting wires through the Grommet (25).

Note: Operation of the TOC should only occur if the thermostat has failed. If the TOC should also fail this results in high temperatures in the dryer and the Full Sequence Control Unit (10) must then be replaced.

REAR ACCESS UPPER

Rear Seal Assy. (14), Drive Belt (125), Drum (266), Drum Shaft and Bearing (270).

Remove the table top assembly (386) and disconnect the Faston terminals from the 2-way Terminal Block (28).

Lay the dryer flat on its front supported to take the weight from the door and controls.

Withdraw the 6-screws securing the Cover Plate (19) and remove it. Pull out the Exhaust Tube (30).

Withdraw the 4-screws securing the Hot Air Elbow (20) and remove it.

Disconnect the External Feed Pipe (15) from the T-piece (27).

Withdraw the 16-screws securing the Rear Banjo (18) and lift it off.

Disconnect the Faston connectors from the Inlet Thermostat (230) and the TOC (38) from the 4-way Terminal Block (142).

Withdraw the 3-screws (412) securing the Drum Shaft and Bearing Assy. (270) to the Back Panel (24).

Withdraw the 8-screws securing the Back Panel (24) to the Cabinet (196). Disengage the T-piece Grommet from the slot in the Back Panel and lift off.

The Rear Seal (14) can be prised off the inside of the Back Panel (24) with a screw-driver, but care should be taken not to damage the inner sheet metal flange. Remove excess adhesive before fitting the replacement Rear Seal (14) using the impact adhesive (Scotchgrip 1099).

To remove the Drive Belt (125) it should be disconnected.

REAR ACCESS (continued)

from the Motor Pulley and lifted off the Drum.

Note: When re-placed the drive belt should be located within the lines marked on the Drum circumference.

After removing the Drive Belt the Drum Assy. (266) can be lifted out.

For dismantling the Drum Rear Bearing (270) access to the Earth Finger (421) securing screw (420) is through a hole in the back of the Drum. After removal of the Earth Finger the screw (422) securing the Drum Shaft Assy. (426)is through a hole in the centre of the back of the Drum.

Note: It is important that the recess in the head of the shaft centre screw (422) is filled with electrically conductive grease, e.g. Electrolube 2G.

When dismantling the Drum Rear Bearing care should be taken not to allow parts to fall into the space between the back of the drum and the drum rear seal plate.

FRONT ACCESS

Front Panel (376), Banjo Assembly (440), Front Seal (442), Front Bearings (441 and 445).

If the Banjo (440) is to be removed then the exhaust thermostats should first be disconnected or removed as described in REAR ACCESS LOWER.

Remove the Top Cover (386), the 3-screws securing the Control Panel lugs to the Cabinet top rail, and the screws securing the Micro-Switch Assy. – see TOP ACCESS.

Lay the dryer on its back.

Withdraw the 2-screws securing the Plinth (199) to the Cabinet, unhook the plinth fixings and remove it.

Withdraw the 2-screws (357) securing the Latch Guide (370) to the Front Panel (376) and remove it.

Withdraw the 2-screws securing the Hinge Assembly (359) to the Front Panel. Remove the Door and Hinge Assy.

Withdraw 3-screws securing the Front panel to the Banjo Assy. (440) -- 2 in the Front Panel bottom flange and 1 countersunk screw adjacent to the door opening.

Withdraw the 4-screws securing the Front Panel to the Cabinet. Lift off the Front Panel.

Disengage the Banjo (440) from the front of the Drum and disengage the location lug with the Cabinet base. Remove the Banjo Assy.

The Front Bearings Short (441) and Long (445) can be unclipped from the Banjo flange to release the Front Seal (442). Care is needed to avoid breaking these bearings.

FAULT FINDING

In the event of an electrical fault carry out the preliminary electrical system checks i.e. earth continuity, polarity, and resistance to earth.

Use each chart to locate the fault causing the dryer to operate incorrectly as follows

Chart No.

1 Motor does not run.

2 Motor runs but full sequence control does not produce ignition spark.

3 Motor runs, Full Sequence Control produces ignition sparks, but gas does not ignite.

4 Motor runs, gas ignites but burns for only a short period.

Chart 1. Motor does not run

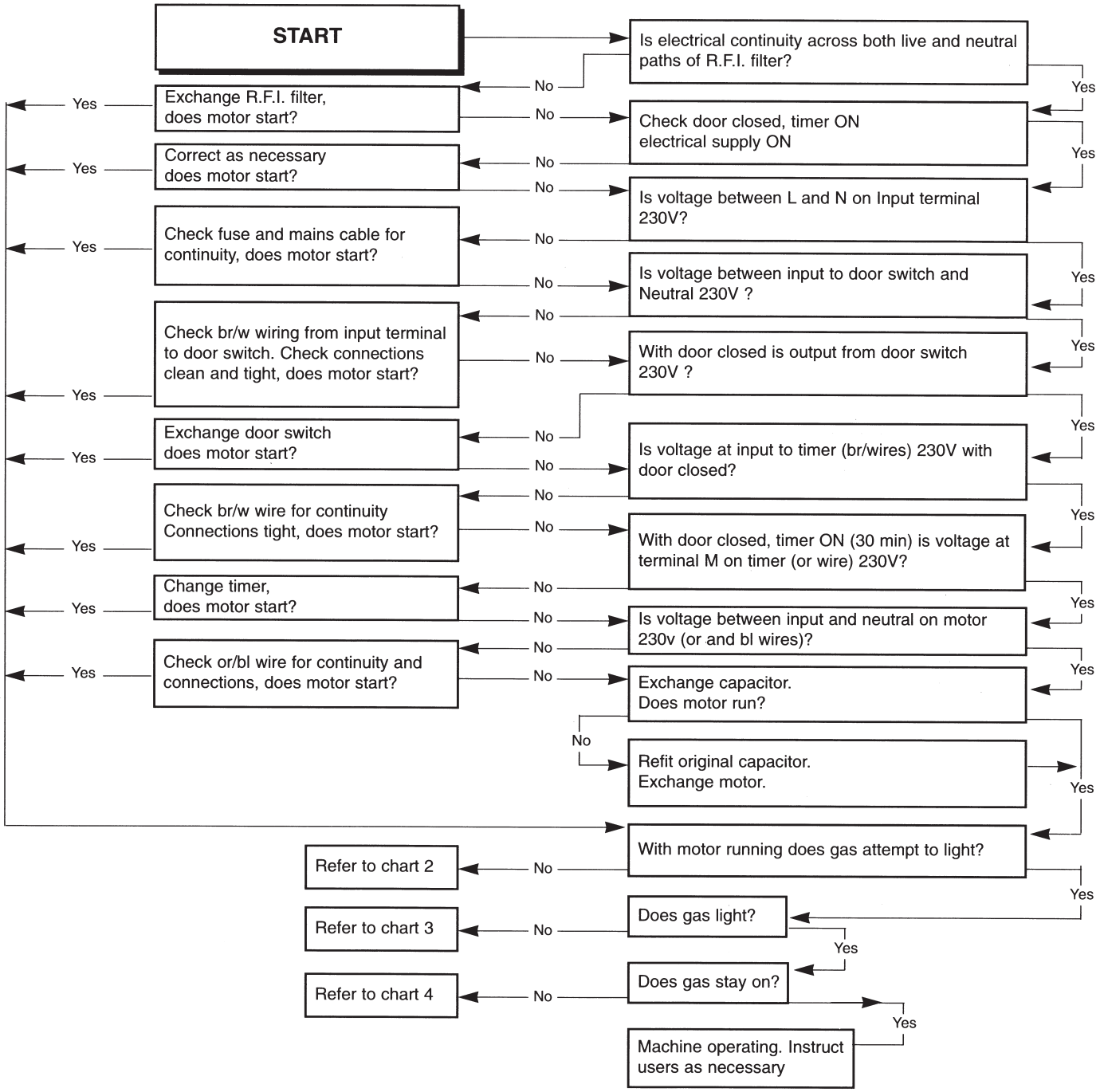


Chart 2.

Motor runs but full sequence control does not produce ignition spark

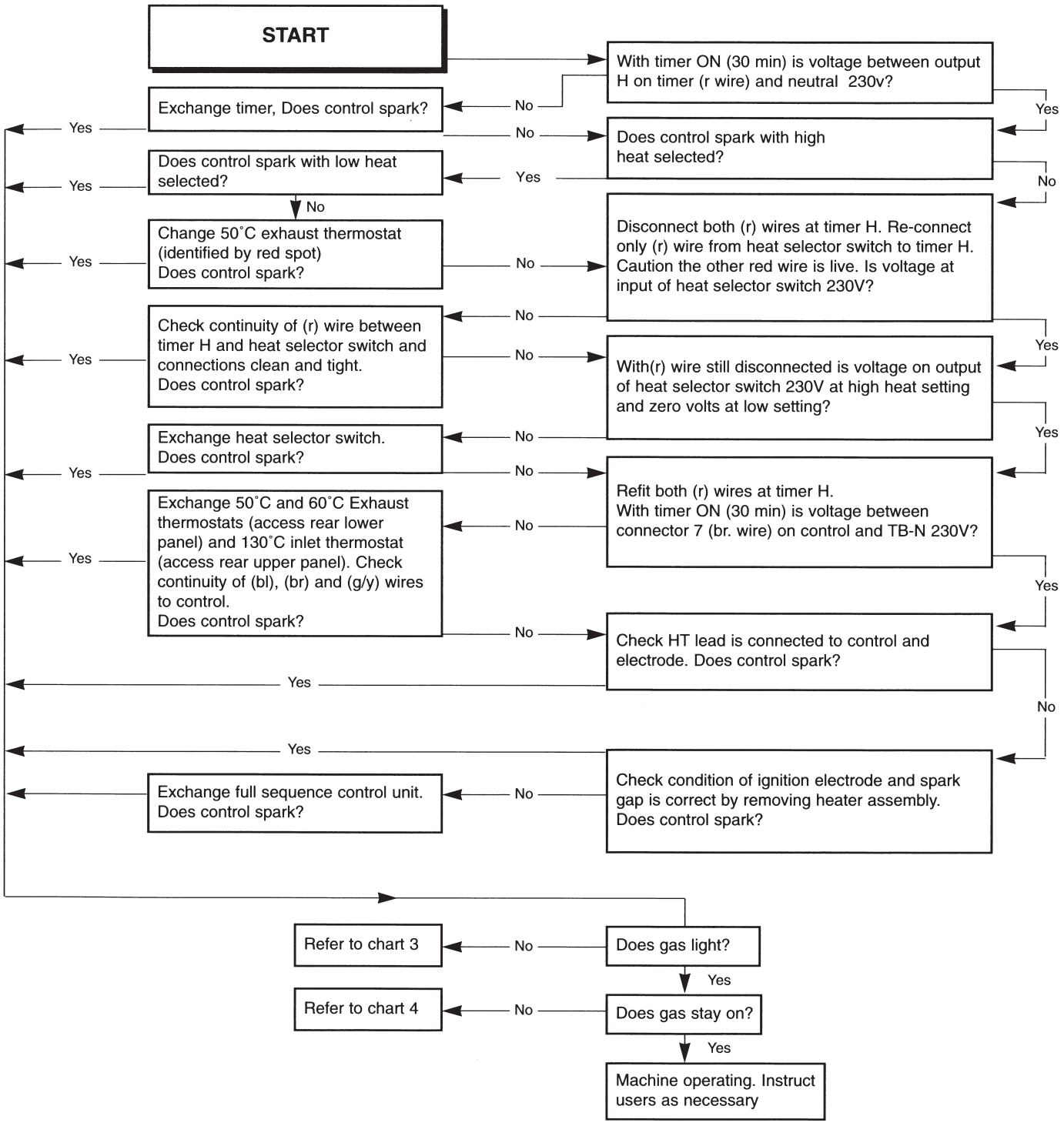

START
With timer ON (30 min) is voltage between output H on timer (r wire) and neutral 230v?
No
Yes
Exchange timer, Does control spark?
Yes
No
Does control spark with high heat selected?
Yes
No
Does control spark with low heat selected?
Yes
No
Change 50˚C exhaust thermostat (identified by red spot) Does control spark?
Yes
No
Disconnect both (r) wires at timer H. Re-connect only (r) wire from heat selector switch to timer H. Caution the other red wire is live. Is voltage at input of heat selector switch 230V?
No
Check continuity of (r) wire between timer H and heat selector switch and connections clean and tight. Does control spark?
Yes
No
With(r) wire still disconnected is voltage on output of heat selector switch 230V at high heat setting and zero volts at low setting?
Yes
No
Exchange heat selector switch. Does control spark?
Yes
No
Refit both (r) wires at timer H. With timer ON (30 min) is voltage between connector 7 (br. wire) on control and TB-N 230V?
Yes
No
Exchange 50˚C and 60˚C Exhaust thermostats (access rear lower panel) and 130˚C inlet thermostat (access rear upper panel). Check continuity of (bl), (br) and (g/y) wires to control. Does control spark?
Yes
No
Check HT lead is connected to control and electrode. Does control spark?
Yes
No
Yes
Check condition of ignition electrode and spark gap is correct by removing heater assembly. Does control spark?
Yes
No
Exchange full sequence control unit. Does control spark?
Does gas light?
No
Refer to chart 3
Yes
Does gas stay on?
No
Refer to chart 4
Yes
Machine operating. Instruct users as necessary

Chart 3. Motor runs Full Sequence Control produces ignition sparks, but gas does not ignite

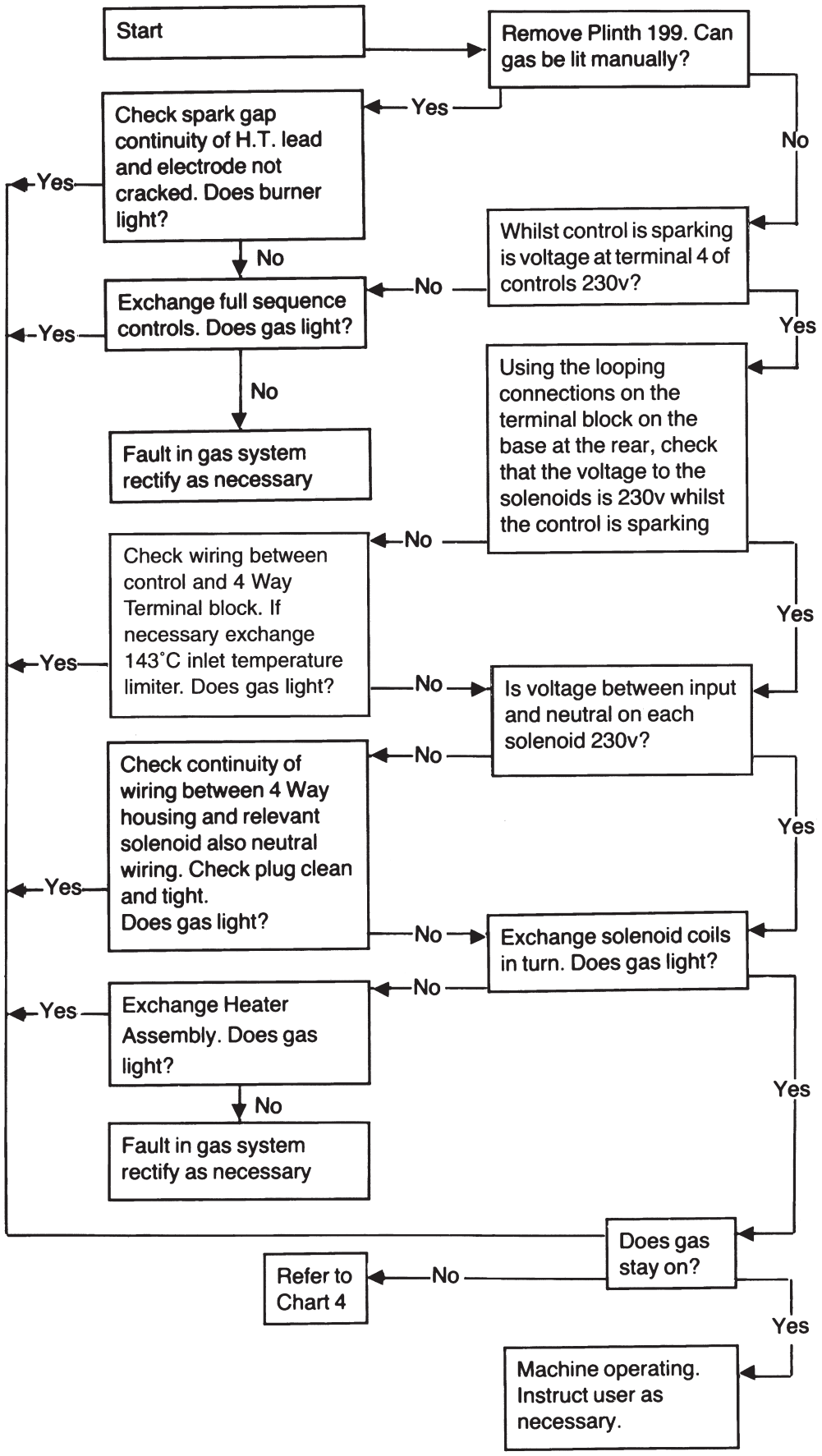
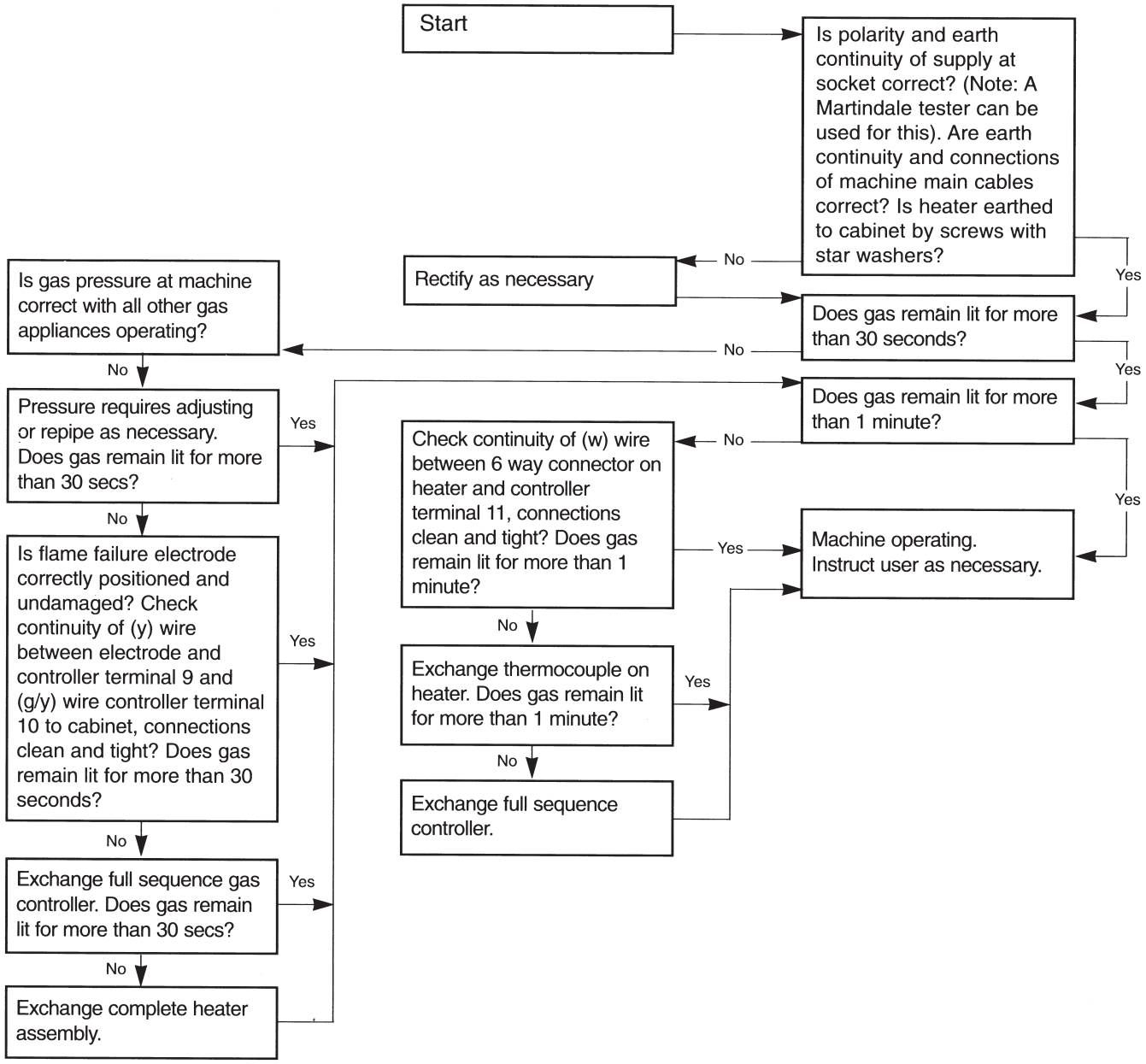
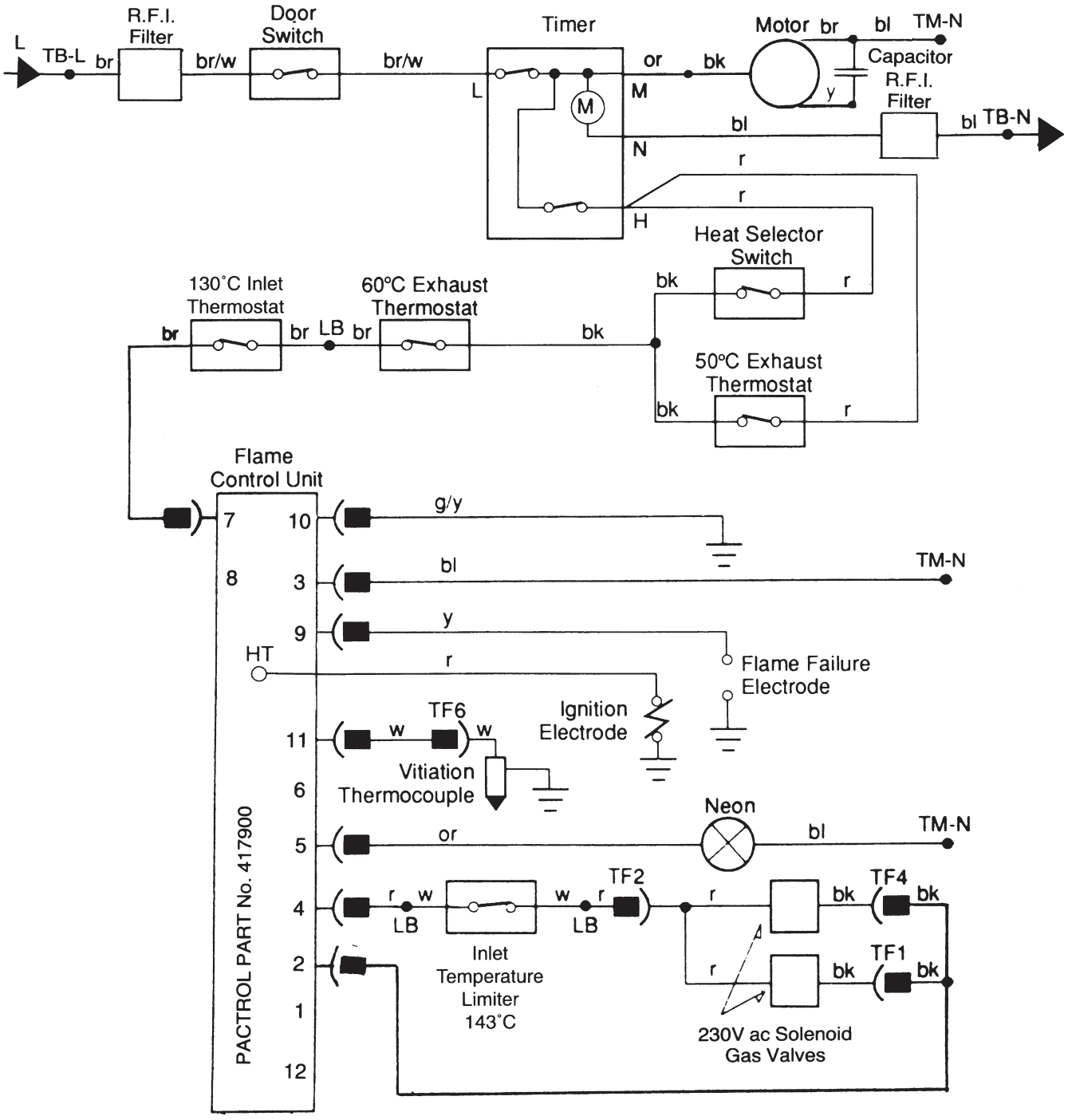

Start
Remove Plinth 199. Can gas be lit manually?
Yes
No
Check spark gap continuity of H.T. lead and electrode not cracked. Does burner light?
Yes
No
Whilst control is sparking is voltage at terminal 4 of controls 230v?
No
Yes
Exchange full sequence controls. Does gas light?
Yes
No
Using the looping connections on the terminal block on the base at the rear, check that the voltage to the solenoids is 230v whilst the control is sparking
Fault in gas system rectify as necessary
No
Yes
Check wiring between control and 4 Way Terminal block. If necessary exchange 143°C inlet temperature limiter. Does gas light?
Yes
No
Is voltage between input and neutral on each solenoid 230v?
No
Yes
Check continuity of wiring between 4 Way housing and relevant solenoid also neutral wiring. Check plug clean and tight. Does gas light?
Yes
No
Exchange solenoid coils in turn. Does gas light?
No
Yes
Exchange Heater Assembly. Does gas light?
Yes
No
Fault in gas system rectify as necessary
Yes
Does gas stay on?
No
Refer to Chart 4
Yes
Machine operating. Instruct user as necessary.

Chart 4. Motor runs, gas ignites but stays on for only short period


Start
Is polarity and earth continuity of supply at socket correct? (Note: A Martindale tester can be used for this). Are earth continuity and connections of machine main cables correct? Is heater earthed to cabinet by screws with star washers?
No
Rectify as necessary
Yes
Does gas remain lit for more than 30 seconds?
No
Yes
Does gas remain lit for more than 1 minute?
No
Yes
Check continuity of (w) wire between 6 way connector on heater and controller terminal 11, connections clean and tight? Does gas remain lit for more than 1 minute?
Yes
Machine operating. Instruct user as necessary.
No
Exchange thermocouple on heater. Does gas remain lit for more than 1 minute?
Yes
No
Exchange full sequence controller.
Is gas pressure at machine correct with all other gas appliances operating?
No
Pressure requires adjusting or repipe as necessary. Does gas remain lit for more than 30 secs?
Yes
No
Is flame failure electrode correctly positioned and undamaged? Check continuity of (y) wire between electrode and controller terminal 9 and (g/y) wire controller terminal 10 to cabinet, connections clean and tight? Does gas remain lit for more than 30 seconds?
Yes
No
Exchange full sequence gas controller. Does gas remain lit for more than 30 secs?
Yes
No
Exchange complete heater assembly.

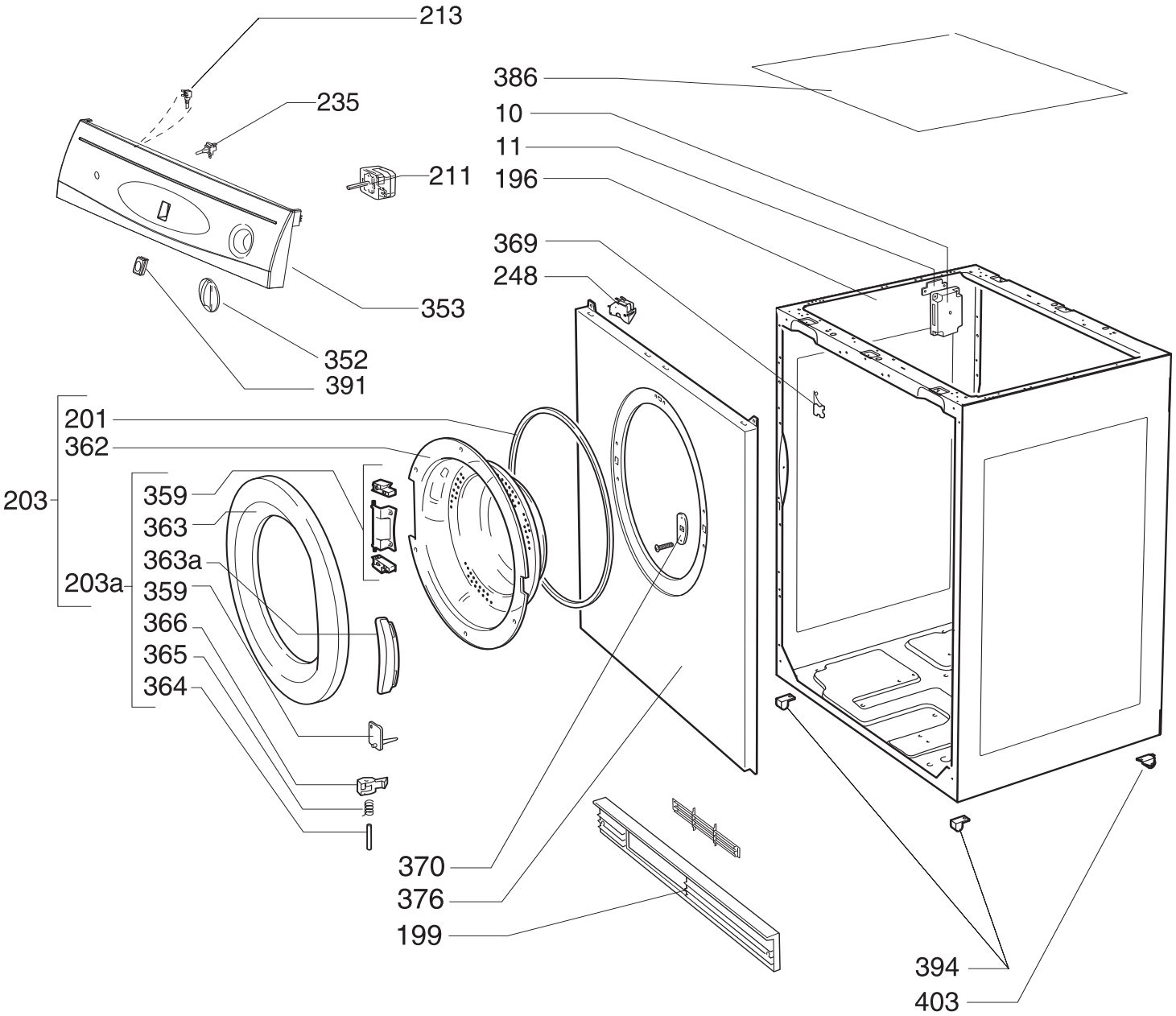
WHITE KNIGHT BG 44A_
CROSSLEE P.L.C.



LB	= 4-way Terminal Block	bl = blue	or = orange
TB	= Main Terminal Block	bk = black	r = red
TF1 to 6	= Tab/Faston Housing	br = brown	w = white
GC1 to 12	= Flame Control Unit Terminals	g = green	y = yellow
TM	= Timer (60 minutes)		

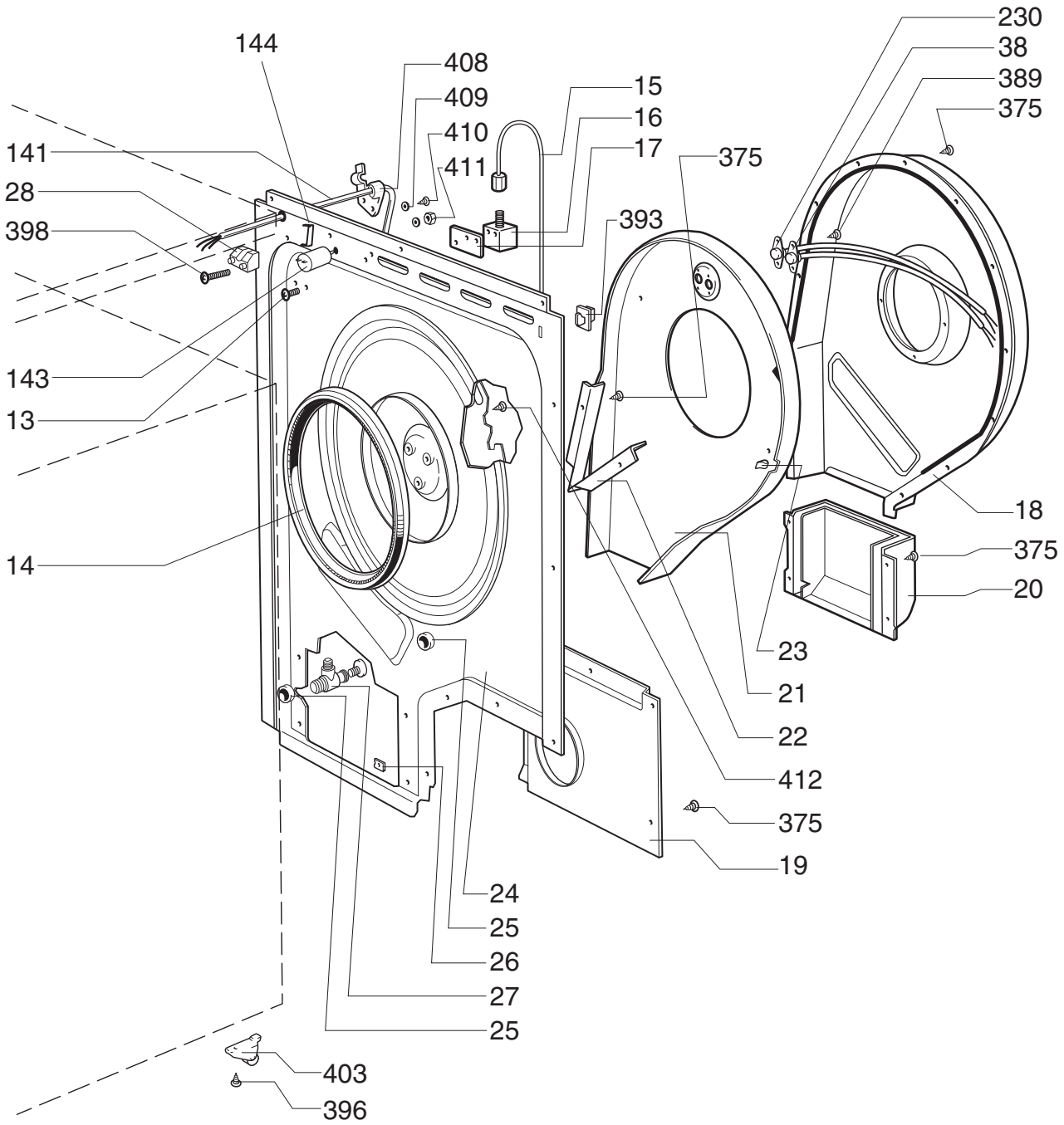
WHITE KNIGHT BG 44A_
CROSSLEE P.L.C.

EXPLODED VIEW 1



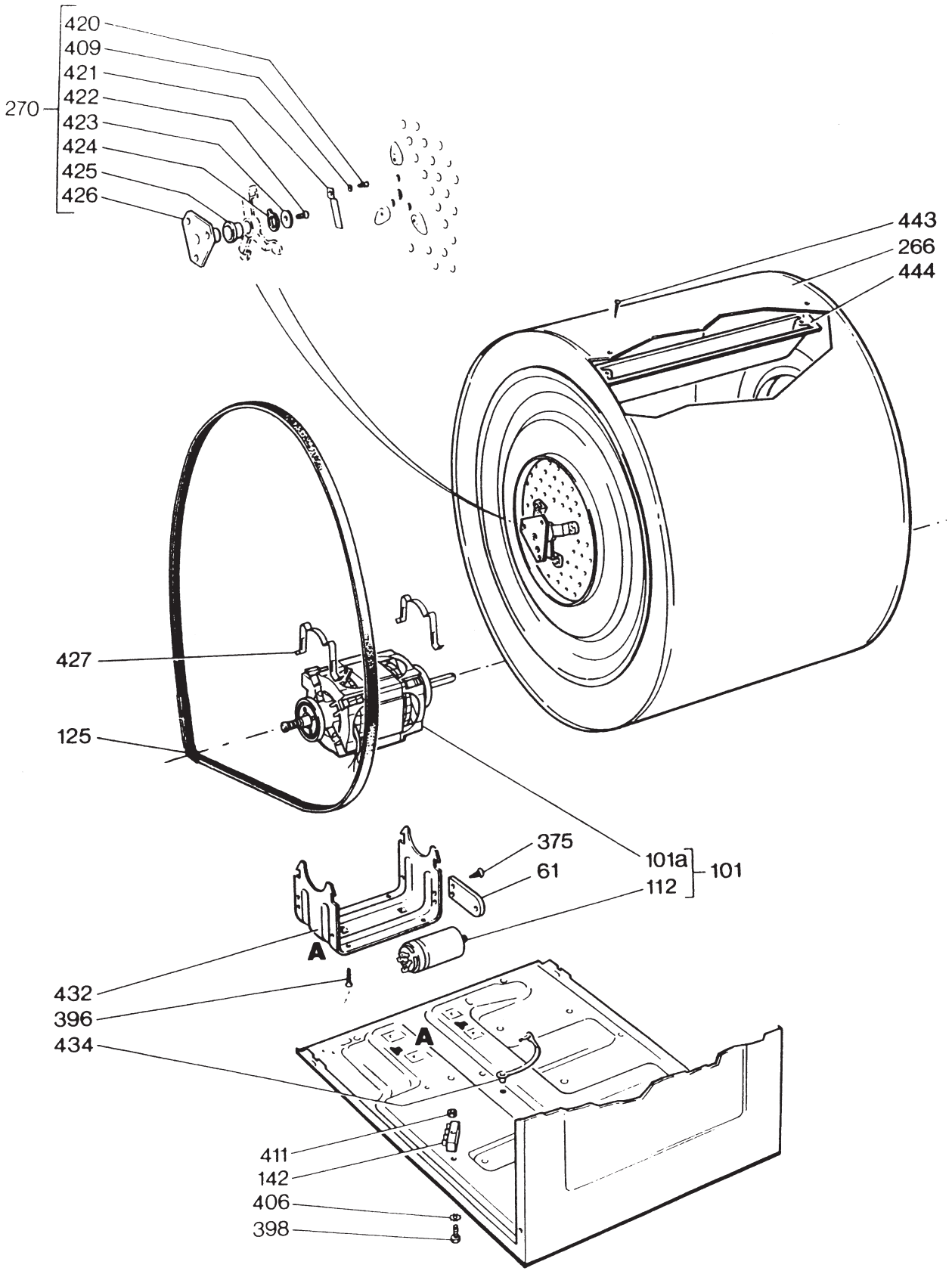
WHITE KNIGHT BG 44A_ CROSSLEE P.L.C. EXPLODED VIEW 2	

REAR ASSEMBLY VIEWED FROM FRONT



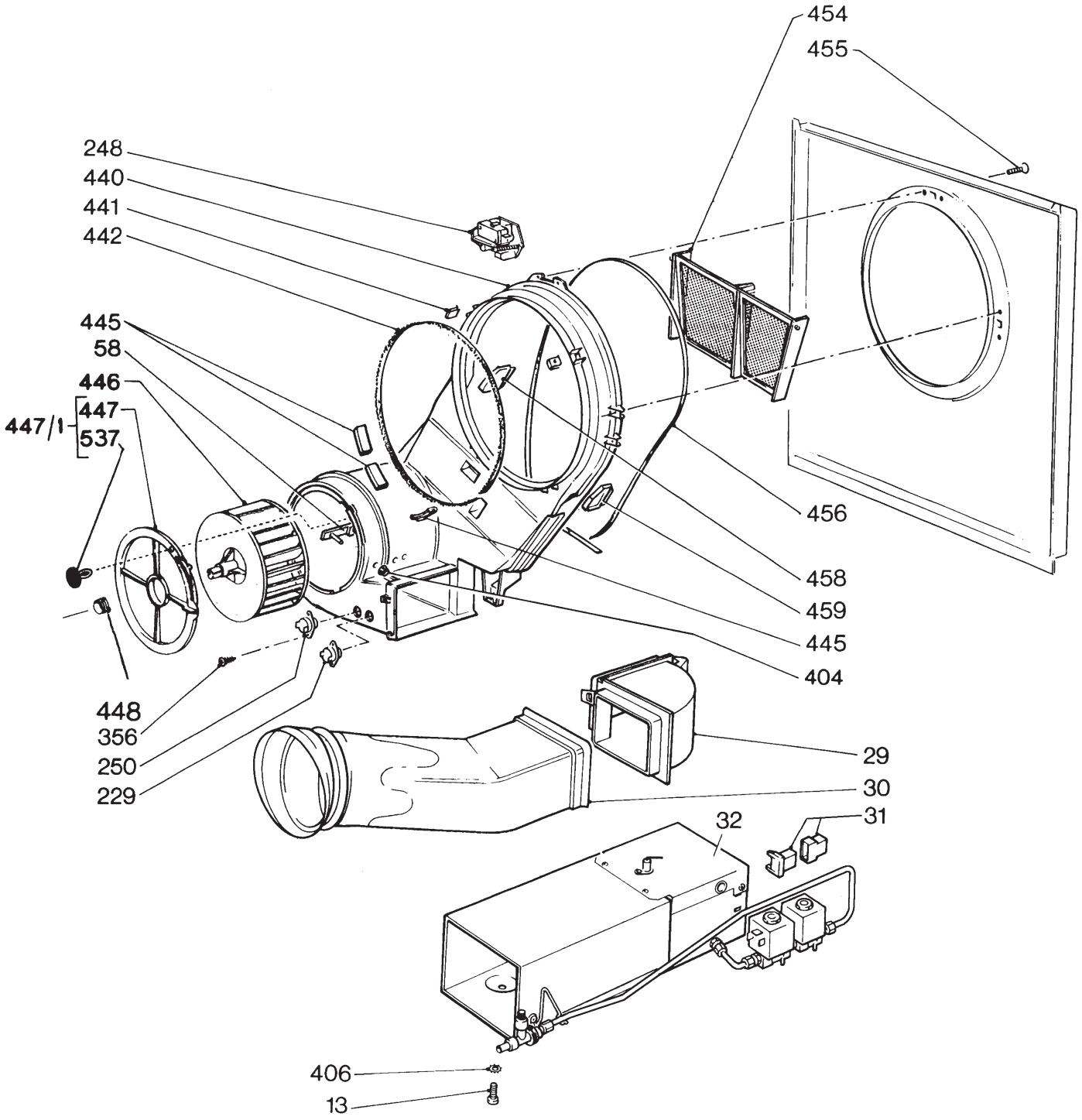
WHITE KNIGHT BG 44A_ CROSSLEE P.L.C. EXPLODED VIEW 3	

INTERNALS VIEWED FROM REAR



WHITE KNIGHT BG 44A_ CROSSLEE P.L.C. EXPLODED VIEW 4	

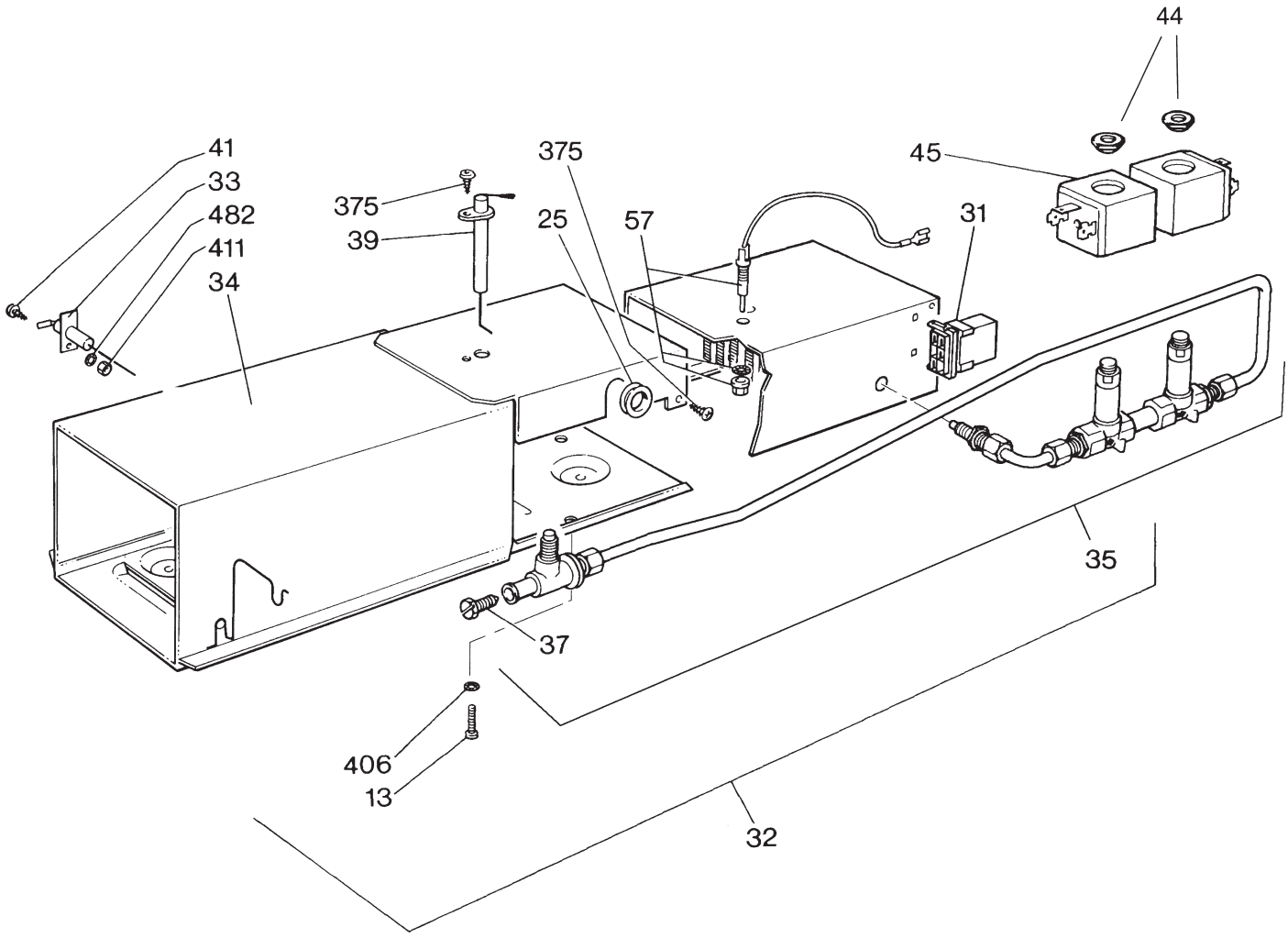
INTERNALS VIEWED FROM REAR



WHITE KNIGHT BG 44A_
CROSSLEE P.L.C.

EXPLODED VIEW 5

HEATER ASSEMBLY



White Knight BG44A_ Parts List

Item	Description	Part Number	Expl. View
10	Control Unit	4213 092 19541	1
11	Control Unit Bracket Assembly	4213 070 08623	1
12	Screw M4 x 20	8213 130 27691	1
13	Screw M4 x 10	8213 130 37161	2, 4 & 5
14	Rear Seal Assembly	4213 092 08511	2
15	External Feed Pipe	4213 089 07883	2
16	Gas Inlet Connector	4213 078 49504	2
17	Restrainer Plate	4213 070 08741	2
18	Rear Banjo	4213 070 08361	2
19	Cover Plate (access)	4213 070 08603	2
20	Hot Air Elbow Assembly	4213 089 09241	2
21	Air Channel/Insulating Plate Assembly	4213 089 07901	2
22	Air Guide	4213 070 08551	2
23	Cable Clip	4213 078 26231	2
24	Back Panel Assembly	4213 089 09232	2
25	Grommet	4213 077 08092	2
26	Captive Nut No 6 'U' Type	8213 130 26301	2
27	Tee Piece/Test Nipple/Plug Assembly	4213 092 08461	2
28	Terminal Block - 2 Way	4213 078 44621	2
29	Exhaust Elbow Assembly	4213 092 08521	5
30	Exhaust Tube	4213 077 48013	5
31	4 Way Housing Assembly	4213 092 08431	4 & 5
32	Burner Assembly	4213 092 09391	5
33	Flame Failure Electrode	4213 092 19801	4
34	Flame Tube Assembly	4213 089 07842	4
37	Test Nipple Plug 4213	078 49422	4
38	Inlet Temperature Limiter 143 Deg C	4213 092 24151	2
39	Ignition Electrode	4213 092 17581	4
41	M4 x 10 Pan Screw	2522 178 08082	4
45	Solenoid Coil (SCEM)	4213 092 08501	4
45a	Not applicable for this machine	n/a	4
52	Circlip	n/a	4
53	Spring Coil	n/a	4
57	Thermocouple Assembly	4213 092 09411	5
61	Capacitor Bracket	4213 070 09323	3
101	Motor and Capacitor Assembly	4213 092 35871	3
101a	Motor Large 220/240v 50Hz	n/a	3
112	Capacitor 8uf	4213 092 08091	3
125	Drive Belt	4213 092 19501	3
141	Mains Cable	4213 076 35122	2
142	Terminal Block	4213 078 44613	3
143	Interference Filter	4213 078 52551	2
196	Cabinet Assembly	4213 092 17761	1
199	Plinth Assembly	4213 089 12651	1
201	Door Seal	4213 077 08341	1
203	Door Frame Assembly	4213 092 17771	1
211	Timer	4213 078 50771	1
213	Neon Assembly	4213 092 09901	1
229	Exhaust Thermostat 60 Deg C	4213 078 53001	5
230	Inlet Thermostat 130 Deg C	4213 092 24161	2
235	Rold Switch (E1026)	4213 078 52401	1
248	Door Microswitch Assembly	4213 092 05251	5
250	Exhaust Thermostat 50 Deg C	4213 078 49453	5
266	Drum Assembly	4213 092 08451	3
270	Drum Shaft/Bearing Kit	4213 092 05591	3
352	Timer Knob Assembly	4213 092 42701	1
353	Control Panel Assembly	4213 092 43411	1
354	Cable Clip	4213 078 26231	1
355	Door Handle Insert	4213 077 52982	1
356	Pan/W Screw St Zn 6 x 7/16	2513 139 03011	1 & 5
357	No 8 x 1 Fl Head S/Tap Screw MC	8213 130 28241	1
359	Door Hinge Assembly	4213 092 26071	1
362	Window	4213 077 44093	1

Item	Description	Part Number	Expl. View
363	Door Frame	4213 077 52694	1
364	Latch Pivot	4213 075 13013	1
365	Latch Spring	4213 075 70833	1
366	Door Latch	4213 077 53413	1
367	Switch Strike	4213 077 53432	1
369	Loom Clip	4213 075 70941	1
370	Latch Guide	4213 077 40992	1
374	Pan Screw St M3 x 10	2522 178 25061	1
375	6 x 3/8 Earth Screw MZP	8213 130 28131	1, 2 & 4
376	Front Panel Assembly	4213 092 18271	1
386	Table Top Assembly - Ellipse	4213 092 42721	1
387	Cable Tie	4213 077 41772	1
389	Screw 6AB x 6.5	2522 163 80023	2
391	Centre Button - Ellipse	4213 077 89001	1
393	Flex Support Clip	4213 077 40982	1 & 2
394	Foot	4213 077 39832	1
396	Flb Ear Scr St Zn 8 x 3/8	2513 200 06166	1, 2 & 3
397	Inlet Filter	4213 081 09192	1
398	Screw M4 x 25	2522 178 25087	2 & 3
403	Roller Assembly	4213 089 00621	2
405	Screw M5 x 16 Hex	4213 078 25872	2
406	M5 Toothed Lockwasher	2522 616 15042	2, 3 & 5
407	Hex Nut DC St Zn M5	2522 401 55012	1 & 2
408	Cable Clamp	4213 077 47303	2
409	Washer M5 Form A	2522 600 65029	2
409	M5 Form A Washer	2522 600 65029	3
410	Fln Tap Scr St Zn 6 x 5/8	2513 154 0602	2
411	M4 Hex Nut 2522	401 55011	2, 3 & 4
412	Screw No 10-24 UNC x 3/8"	8213 130 31051	2
420	Incorporated in 270		3
421	Incorporated in 270		3
422	Incorporated in 270		3
423	Incorporated in 270		3
424	Incorporated in 270		3
425	Incorporated in 270		3
426	Incorporated in 270		3
427	Motor Retaining Clips	4213 078 45361	3
432	Motor Mounting Bracket	4213 070 06756	3
434	Loom Strap	4213 078 46311	3
435	M8 Shakeproof Washer	8213 130 28961	3
436	M8 Hex Nut	8213 130 30651	3
440	Banjo Assembly	4213 092 09441	5
441	Front Bearing (short)	4213 077 40952	5
442	Front Seal	4213 077 61701	5
443	8 x 5/8 Recessed Pan Head Screw	8213 130 28641	3
444	Lifter	4213 077 41009	3
445	Front Bearing (long)	4213 077 40962	5
446	Fan	4213 092 18901	5
447	Access Cover (fan)	n/a	5
447/1	Access Cover Assembly	4213 092 18081	5
451	Fln Tap Scr St Zn 8 x 1/2	2513 152 02001	1
454	Filter	4213 092 17821	5
455	Screw 6 x 1/2	2522 164 26009	5
456	Banjo Seal	4213 077 07991	5
458	Banjo Insert No 2	4213 077 53502	5
459	Banjo Insert No 1	4213 077 53492	5
482	M4 Toothed Lockwasher	2522 616 15007	4
537	W' Button (access cover)	4213 078 26311	5
555	Rear Panels Seal Kit	4213 092 28001	2

Bearing Pads & Brush Seal Kit	4213 092 21171	
Loom Assembly	4213 076 54892	
User Instruction Booklet	4213 094 56167	